

310

JOURNAL OF Ultrastructure Research

Editor

FRITIOF S. SJÖSTRAND

Editorial Board

U. AEBI • B. AFZELIUS • J. ANDRÉ • B. BACCETTI • G. F. BAHR • A. BAIRATI • R. F. BAKER

T. S. BAKER • L. BARAJAS

R. J. BARNETT • P. BAUDHUIN • S. R. BAWA • S. BULLIVANT

D. CARLSTRÖM • P. CASSIER

A. CLAUDE • A. I. COHEN • V. E. COSSLETT • W. TH. DAEMS • A. J. DALTON • M. DVOŘÁK

R. M. EAKIN • F. A. EISERLING

R. EKHOLM • K. ESAU • A. FREY-WYSSLING • L. L. HOEFERT • R. W. HORNE

S. INOUÉ • E. KELLENBERGER • A. L. LEHNINGER • J. H. LUFT • A. G. MATOLTSY

A. MAUNSBACH • R. K. MISHRA • L. PACKER • E. PAGE • S. L. PALAY • D. C. PEASE

J. B. LE POOLE • E. PUVION • J. T. RANDALL • J. F. REGER • E. J. REITH • J. P. REVEL

A. C. RHODIN • H. RIS • D. C. ROGERS • G. E. ROGERS • E. RUSKA • J. SCHRÉVEL • A. P. SOMLYO • W. STELL

H. THEORELL • E. VIVIER • E. R. WEIBEL • R. S. WEINSTEIN • W. G. WHALEY • R. W. G. WYCKOFF

Volume 82
1983



ACADEMIC PRESS, INC., PUBLISHERS, NEW YORK AND LONDON

A Subsidiary of Harcourt Brace Jovanovich, Publishers

Copyright © 1983 by Academic Press, Inc.

All rights reserved

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, any information storage and retrieval system, without permission in writing from the copyright owner.

The appearance of the code at the bottom of the first page of an article in this journal indicates the copyright owner's consent that copies of the article may be made for personal or internal use, or for the personal or internal use of specific clients. This consent is given on the condition, however, that the copier pay the stated per copy fee through the Copyright Clearance Center, Inc. (21 Congress Street, Salem, Massachusetts 01970), for copying beyond that permitted by Sections 107 or 108 of the U.S. Copyright Law. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale. Copy fees for pre-1983 articles are as shown on the article title pages; if no fee code appears on the title page, the copy fee is the same as for current articles.

0022-5320/83 \$3.00

MADE IN THE UNITED STATES OF AMERICA

Contents of Volume 82

NUMBER 1, JANUARY 1983

BARRY F. KING. Ultrastructure of the Nonhuman Primate Vaginal Mucosa: Epithelial Changes during the Menstrual Cycle and Pregnancy	1
ROMANO DALLAI AND MASSIMO MAZZINI. Sperm Axoneme of Two Rows of Doublets Reversely Oriented in the Gall-Midge <i>Lestremia</i> (Diptera, Cecidomyiidae)	19
MARGARET J. IRONS. Synthesis and Assembly of Connecting-Piece Proteins as Revealed by Radioautography	27
ALLAN S. MICHAELS, CAROLE L. JELSEMA, AND RUSSELL J. BARNETT. Membrane Lipid Metabolism in <i>Chlamydomonas reinhardtii</i> 137 ⁺ and γ -1: II. Cytochemical Localization of Acyltransferase Activities	35
MARCELLO RUSSO, ALESSANDRA DI FRANCO, AND GIOVANNI P. MARTELLI. The Fine Structure of <i>Cymbidium</i> Ringspot Virus Infections in Host Tissues. III. Role of Peroxisomes in the Genesis of Multivesicular Bodies	52
JACOB DAVIDOWITZ, GLORIA PHILIPS, AND GOODWIN M. BREININ. Membrane-Glycogen Complexes in Rabbit Extraocular Muscle	64
K. G. BENSCH, P. M. DAVISON, AND M. A. KARASEK. Factors Controlling the <i>in Vitro</i> Growth Pattern of Human Microvascular Endothelial Cells	76
BECHARA KACHAR AND THOMAS S. REESE. Formation of Misplaced and Reflexive Tight Junction Strands in Prostate Epithelial Cells	90
EDWARD C. CARLSON AND DAVE HINDS. A Topographical (SEM) Analysis of Acellular Glomerular Mesangial Matrix <i>in Situ</i>	96
R. D. SJOLUND AND C. Y. SHIH. Freeze-Fracture Analysis of Phloem Structure in Plant Tissue Cultures. I. The Sieve Element Reticulum	111

NUMBER 2, FEBRUARY 1983

KENNETH R. MILLER, CYNTHIA S. PRESCOTT, TERESA L. JACOBS, AND NANCY L. LASIGNAL. Artifacts Associated with Quick-Freezing and Freeze-Drying	123
L. STANISLAWSKI. Attachment of Rous Sarcoma Virus to the Fibronectin Matrix of Infected Chick Embryo Fibroblasts	134
HORST ROBENEK, ARPAD HESZ, AND JÜRGEN RASSAT. Variability of the Topography of Low-Density Lipoprotein (LDL) Receptors in the Plasma Membrane of Cultured Human Skin Fibroblasts as Revealed by Gold-LDL Conjugates in Conjunction with the Surface Replication Technique	143
F. KENNETH NELSON, PATRICE S. ALBERT, AND DONALD L. RIDDLE. Fine Structure of the <i>Caenorhabditis elegans</i> Secretory-Excretory System	156
NIGEL G. F. COOPER, BARBARA J. McLAUGHLIN, AND LOU G. BOYKINS. Synaptic Membrane Domains in Photoreceptors of Chick Retina: A Thin-Section and a Freeze-Fracture Study	172
R. D. SJOLUND AND C. Y. SHIH. Freeze-Fracture Analysis of Phloem Structure in Plant Tissue Cultures. II. The Sieve Element Plasma Membrane	189
R. D. SJOLUND, C. Y. SHIH, AND K. G. JENSEN. Freeze-Fracture Analysis of Phloem Structure in Plant Tissue Cultures. III. P-Protein, Sieve Area Pores, and Wounding	198
KLAUS HAUSMANN, MICHAEL LINNENBACH, AND DAVID J. PATTERSON. The Effects of Taxol on Microtubular Arrays: <i>In Vivo</i> Effects on Heliozoan Axonemes	212

DOUGLAS E. CHANDLER, JONATHAN P. BENNETT, AND BASTIEN GOMPERTS. Freeze-Fracture Studies of Chemotactic Peptide-Induced Exocytosis in Neutrophils: Evidence for Two Patterns of Secretory Granule Fusion	221
G. A. PESCHEK AND U. B. SLEYTR. Thylakoid Morphology of the Cyanobacteria <i>Anabaena variabilis</i> and <i>Nostoc</i> MAC Grown under Light and Dark Conditions	233
ERRATUM	
Volume 81, Number 2, November 1982: W. J. Lucas and V. R. Franceschi, "Organization of the Sieve-Element Walls of Leaf Minor Veins," pp. 209-221	240

NUMBER 3, MARCH 1983

JAVIER CERVERA, MERCEDES ALAMAR, AMELIA MARTINEZ, AND JAIME RENAUPQUERAS. Nuclear Alterations Induced by Cadmium Chloride and L-Canavanine in HeLa S3 Cells. Accumulation of Perichromatin Granules	241
GEORGE SETTERFIELD, RONALD HALL, TREVOR BLADON, JUDITH LITTLE, AND J. GORDIN KAPLAN. Changes in Structure and Composition of Lymphocyte Nuclei during Mitogenic Stimulation	264
L. REMY, B. VERRIER, M. MICHEL-BECHET, E. MAZZELLA, AND A. M. ATHOUËL-HAON. Thyroid Follicular Morphogenesis Mechanism: Organ Culture of the Fetal Gland as an Experimental Approach	283
JEAN-LOU JUSTINE ET XAVIER MATTEL. Etude ultrastructurale comparée de la spermiogenèse des Monogènes. I. <i>Megalocotyle</i> (Monopisthocotylea Capsalidae)	296
YASUO KITAJIMA, KIYOMI EGUCHI, TADAO OHNO, SHUNJI MORI, AND HIDEO YAOITA. Tight Junctions of Human Keratinocytes in Primary Culture: A Freeze-Fracture Study	309
KIYOSHI TAKAHASHI AND MEHDI TAVASSOLI. Internalization of Iron-Transferrin Complex by Murine L1210 Leukemia Cells and Rat Reticulocytes Demonstrated by a Minibead Probe	314
KEIZO MARUYAMA. Stereoscopic Scanning Electron Microscopy of the Chromosomes in <i>Vicia faba</i> (Broad Beans)	322
ROGER G. ULRICH AND J. KEITH MCCLUNG. Analysis of Erythrocyte-Mediated Microinjection by Backscattered Electron Imaging	327
G. M. BRESSAN, I. CASTELLANI, M. G. GIRO, D. VOLPIN, C. FORNIERI, AND I. PASQUALI RONCHETTI. Banded Fibers in Tropoelastin Coacervates at Physiological Temperatures	335
EDUARDO BONILLA. Ultrastructural Study of the Muscle Cell Surface	341
ERRATUM	
Volume 81, No. 3, December 1982: Bertrand Picheral and Michel Charbonneau, "Anuran Fertilization: A Morphological Reinvestigation of Some Early Events," pp. 306-321	346
AUTHOR INDEX FOR VOLUME 82	348

The Subject Index for Volume 82 will appear in the December 1983 issue as part of a cumulative index for the year 1983.